

We claim:

1. A pneumatic brake booster comprising an envelope (2) of longitudinal axis (X) formed of a first (4) and of a second (6) shell, and defining an interior volume divided by a moving skirt into a low-pressure first chamber and a variable-pressure second chamber, a three-way valve (12) actuated by a control rod and placing the front chamber and the rear chamber in communication at rest and during a braking phase interrupting the communication between the front chamber and the rear chamber and supplying the rear chamber with pneumatic fluid at high pressure, said booster also comprising at least one means (46) for securing a master cylinder to said booster, advantageously two means for securing a master cylinder to said booster, characterized in that said means (46) allow the master cylinder to be attached to the booster by clip-fastening.
2. The booster according to Claim 1, characterized in that said means (46) comprise tabs (52) secured to a second sleeve tube (48) secured to the booster and running radially outward from said second sleeve tube (48).
3. The booster according to claim 1, characterized in that said tabs (52) are plastically deformable in the radial direction so as to enter a passage (54) made in a flange (56) of the master cylinder during the operation of attaching the master cylinder to the booster and so as to return to the initial position when the attachment operation is complete.
4. The booster according to claim 3, characterized in that said tabs are regularly angularly distributed, advantageously being two in number, diametrically opposed.
5. The booster according to claims 4, characterized in that it comprises at least one second sleeve tube (48) secured to the first shell (4) of the envelope (2) of the booster.
6. The booster according to Claim 5, characterized in that the second sleeve tube is mounted securely on a spacer element (18) arranged between the first (4) and second (6) shells of the booster and of longitudinal axis parallel to the axis (X) of the booster.
7. The booster according to claim 6, characterized in that the spacer element (18) in which the second sleeve tube (48) is mounted via an orifice (14) made in the first shell (4) is of tubular shape.
8. The booster according to claim 7, characterized in that the spacer element (18) comprises annular elements (30, 32) at a first (20) and at a second (19) longitudinal end bearing against the interior faces (26, 28) of the first and second shells (4, 6).

9. The booster according to claim 8, characterized in that said annular elements (30, 32) are loose flanges attached to the first and second ends (20,19) of the spacer element (18).

5 10. The booster according to claim 9, characterized in that the booster comprises a means (34) for angularly indexing the booster with respect to a bulkhead of a motor vehicle secured to the second shell (6) of the booster.

11. The booster according to claim 10, characterized in that the angular indexing means (34) are formed of a longitudinal end of a first sleeve tube (36) projecting from the second shell (6) toward the outside of the envelope (2) of the booster.

10 12. The booster according to claim 11, characterized in that the first sleeve tube (36) is secured to the spacer element (18).

13. The booster according to claim 12, characterized in that the first and second sleeve tube (36, 48) are force-fitted into the spacer element (18).

15 14. The booster according to claim 13, characterized in that the first (36) and second (48) sleeve tubes have longitudinal flutes (39,139) projecting from their exterior periphery and forcibly collaborating with the interior surface of the tubular spacer element (18).

15. The booster according to claim 14, characterized in that the first (36) and second (38) sleeve tubes are made of thermoplastic.

20 16. The booster according to claim 15, characterized in that the first and second sleeve tubes (36, 48) comprise means (38, 40, 138, 140) leaktightly isolating the inside of the booster from the external environment.

17. The booster according to claim 16, characterized in that the sealing means (38, 40, 138, 140) are made of elastomeric thermoplastic.

25 18. A braking system comprising a master cylinder equipped with a flange (56) pierced with diametrically opposed passages (54) and with a pneumatic brake booster, characterized in that said booster is a booster according to any one of the preceding claims and in that the passages (54) made in the flange and collaborating with the means (46) for attachment by clip-fastening allow the master cylinder to be clip-fastened onto
30 the booster.

19. The braking system according to claim 18, characterized in that it is secured to a bulkhead of a motor vehicle using tierods (17) mounted in the first and second sleeve tubes (36, 48) and the spacer element (18) so as to emerge on each side of the booster along the longitudinal axis (X).

20. The braking system according to claim 19, characterized in that the tierod (17) comprises, at first and second longitudinal ends, a first and a second screw thread collaborating with a first and a second (62) nut, said first nut allowing the booster to be fixed to the bulkhead and the second nut stiffening the envelope (2) of the booster and reinforcing the attachment of the master cylinder to the booster.

21. The braking system according to claim 20, characterized in that the second nut (62) comprises means (64) for breaking off the tabs (52) of the clip-fastening attachment means as the second nut (62) is screwed onto the tierod (17).

22. The braking system according to claim 21, characterized in that the breaking means (64) comprise at least one ramp (68) made on one face of the nut in contact with the flange of the master cylinder and orientated in such a way that the depth of said ramp (68) decreases as the second nut (62) is tightened.